

HANCOCK
ASSOCIATES

**Supplemental Submittal of
Wetlands Notice of Intent Application**
For
A Solar Panel Facility
1291 Broadway
Haverhill, MA

DEP File #33-1406

Prepared By:
Hancock Associates
#19168

Prepared For:
Clean Energy Collective, LLC

November 3, 2016

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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Haverhill

City/Town

A. General Information (continued)

6. General Project Description:

Construction of a solar panel facility with an access road crossing of BVW, and solar panels, electrical conduit, detention basins, grading and fencing in the 100 ft Buffer Zone.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- | | |
|---|---|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input checked="" type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> Other | |

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Essex South

a. County

33967

c. Book

b. Certificate # (if registered land)

377

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☒ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	1,640 1. square feet	1,660 2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- ☐ 25 ft. - Designated Densely Developed Areas only
- ☐ 100 ft. - New agricultural projects only
- ☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

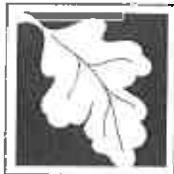
a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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D. Additional Information (cont'd)

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Permit Site Plans, Solar Panel Facility, 1291 Broadway, Haverhill, Clean Energy Collective

a. Plan Title

Hancock Associates

Vaclav V. Talacko, PE

b. Prepared By

c. Signed and Stamped by

11/03/16

1"=30'

d. Final Revision Date

e. Scale

revised project narrative

11/03/16

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☒ Attach NOI Wetland Fee Transmittal Form
9. ☒ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

1830

10/11/16

2. Municipal Check Number

3. Check date

1832

10/11/16

4. State Check Number

5. Check date

Clean Energy Collaborative, LLC

6. Payor name on check: First Name

7. Payor name on check: Last Name

Filing Fee Materials
Revised Local Ordinance Sheet



HA File #19168

Haverhill

Economic Development and Planning

Conservation Department

Phone: 978-374-2334 Fax: 978-374-2366

rmoore@cityofhaverhill.com

conservation@cityofhaverhill.com

2016 LOCAL ORDINANCE FEE CALCULATION FORM

APPLICATION NAME / ACTIVITY	LOCAL ORDINANCE FEE	# of Activities or Measurement	Subtotal
%*Request for a Determination of Applicability (RDA)	\$100		
*Abbrev. Notice of Resource Area Delineation (ANRAD)			
Single Family House Project	\$1/linear foot, first 100'; \$0.50/lf, second 100'; \$0.10/lf, each additional foot		
All Other Projects	***\$1/linear foot, first 1000'; \$0.50/lf, second 1000'; \$0.10/lf, each additional foot		
%*Notices of Intent (NOI)			
Category 1 Activity	\$100		
Cat. 2J Category 2 Activity	\$250	1	\$250
Category 3 Activity	\$525		
Cat. 4A Category 4 Activity	\$725	1	\$725
Category 5 Activity	\$2/foot		
Category 6 Activity - If no ANRAD was filed for the project site, then a local Cat. 6 fee must be paid in accordance with the ANRAD fee schedule	See ANRAD fee schedule	733 LF	\$733
%*Request for a Modification to an OOC (RMOC)	\$100		
Resource Area Alterations (for NOI & RMOC)			
Buffer Zone, 75'-100' from resource area boundary	\$0.05 / square foot	831 SF	\$41.55
Buffer Zone, 35'-75' from resource area boundary	\$0.10 / square foot	5,851 SF	\$585.10
Buffer Zone, 0'-35' from resource area boundary	\$0.25 / square foot	5,507 SF	\$1,376.75
Bordering Vegetated Wetland	\$0.50 / square foot	1,640 SF	\$820
Bank	\$5 / linear foot		
Land Under Water	\$0.50 / square foot		
Land Subject to Flooding	\$0.05 / square foot		
Riverfront Area	\$0.05 / square foot		
Riverfront Area with the watershed of a potable water supply	\$0.50 / square foot		
Land within 100' of a Certified Vernal Pool	\$0.25 / square foot		
Local-only Jurisdictional Resource Area	\$0.25 / square foot		
Land within 200' of a potable water supply	\$0.50 / square foot		
Extension Permit	\$250		
Certificate of Compliance	Partial: \$100 / Complete: \$100 - individual house lot project; \$250 - all other projects / Invalid: \$100		
ADVERTISING FEE (if applicable*)			\$45 - Paid 13 Oct 2016
LOCAL ORDINANCE FEE TOTAL			\$3,556.40
For filings resulting from enforcement action, double the Local Ordinance Fee Total			
NOTES:			
*Application is subject to an additional \$45 Local Advertising Fee payable to the City of Haverhill prior to each advertising			
***Local Ordinance Fee maximum of \$100, if, when determined necessary by Commission, applicant agrees to ANRAD review by outside consultant under M.G.L. Ch. 44, sec. 53G			
%Local Ordinance Fees for RDA, NOI, & RMOC increase 50% when project is also proposed within a Riverfront Area			
Local Ordinance Fees passed by a 7 - 0 vote of the Commission on October 28, 2010, effective January 1, 2011			

Revised Project Narrative

Purpose of NOI Application

Clean Energy Collective, LLC proposes to install a ground mounted solar energy system at 1291 Broadway in Haverhill, Massachusetts. The proposed project consists of an approximately 0.99 Megawatt (DC) solar array on an approximately 24.5-acre parcel.

Associated site improvements will include a gravel access road with a subsurface electrical conduit, fencing, and stormwater management system. The project area will be approximately 10-acres. The project site is bounded by residential properties to the east, west, southeast, and southwest. Land owned by the Massachusetts Electric Company is located to the north.

This Notice of Intent is for revisions to the access roadway location and stormwater management system from DEP File #33-1379.

At the site walk conducted with the Haverhill Conservation Commission's Agent on October 26, 2016, it was determined that portions of the southeast section of the land where the access road is proposed (DEP File # 33-1406) have less wetland area than previously mapped. Hancock Associates field delineated this area on October 27, 2016 and the wetland flags were located by survey as shown on Sheet EC1. The revision of this section of the wetland boundary results in a significant reduction in proposed wetland impacts from 8,300 square feet to 1,640 square feet. Sheet M-1 provides the planting specifications and notes for a wooded mitigation area with a ratio of impacts to mitigation of 1:1.

The supplemental submittal provides copies of the Notice of Intent materials that were revised since the October 13, 2016 filing. A full set of revised plans are provided with an additional sheet with the wetland mitigation information.

Resource Area and Buffer Zone Impacts

The proposed access roadway will impact 1,640 square feet of wooded Bordering Vegetated Wetland. The proposed location of a wetland mitigation area is shown on the plan, and will provide 1,660 square feet of wooded replacement wetland. The mitigation location is upstream of the impact area, part of the same wetland system. The mitigation area is adjacent to the wettest part of this wetland system, and will be constructed in a previously disturbed landscape setting. The planting specifications and grading of the mitigation area are provided on Sheet M-1.

To avoid impacts to the trees on the southern property lines, and alteration of the 25 foot No-Build No-Disturbance Zone to the extent feasible, the revised access road layout (southeast section) was shifted slightly north.

The 100 foot Buffer Zone, 25 foot No-Build No-Disturbance Zone and 50 foot No-Build Zone lines were revised to reflect the new wetland boundary in the southeast section of the site, and at the proposed wetland mitigation area.

Response to Commission Review Comments

Responses to Commission Review Comments

4. **#33-1406 Clean Energy Collective, LLC for 1291 Broadway** -The Commission issued an Order in March (#33-1379) approving the construction of a solar facility on this site. The OOC is valid. This original proposal used an existing gravel driveway to access the facility across the owner's residential parcels at 1305 & 1311 Broadway. I anticipate the applicant providing you with the background that has since prompted this new filing. I've sought legal counsel with regard to the filing on two points: conditioning the project in a manner that discourages its implementation (this is discussed in one of the applicant's new submittals) and the requested conditional deferral of the local filing fee. I will discuss these items further during the hearing, as may be necessary. Following my site walk, yesterday, it appears the first matter may be moot. The wetland delineation along the eastern property line does not appear accurate. It appears much of the new access drive would be across an upland area. Further delineation work is needed. On the second matter, we have been advised against deferring any filing fees. Local filings fees should be recalculated, based on a revised plan, and submitted with the revised plan. I offer the following comments on the new proposal:

Response:

The wetland delineation was revised in the southeast section of the site on October 27, 2016. This portion of the roadway was revised and the area of wetland impact was reduced from 8,300 square feet to 1,640 square feet as a result of this recent wetland delineation.

The applicant will submit a check for the local wetland ordinance filing fee prior to the continued public hearing on November 17, 2016 for the proposed activities that have change from the original NOI (DEP File #33-1379).

a. The project has been filed as a Limited Project under 310 CMR 10.53(3)(t). I don't know that the project qualifies as such, in light of the applicant's demonstration to the contrary with the original submittal. The genesis of the new project is financing-related, not ownership-related. Nonetheless, a closer look at the wetland boundary in this area will likely present a project with far less wetland impact than is currently shown.

Response:

Limited project status is no longer requested because the proposed wetland impacts are less than 5,000 sf.

- b. The solar facility remains largely unchanged from that originally approved. Any changes are associated with the new access drive. Minimal changes to the stormwater design are evident. Does the Commission wish for any changes to be peer reviewed?

Response:

The Commission decided at the October 27, public hearing that peer review was not needed.

- c. The wetland in the vicinity of Flags A25/26/27 appears to flow through the stone wall and into a channel that runs southerly along the east side of the wall (Sanzi parcel). This channel is represented by an elongated, dashed-rectangle on the plan. The channel previously drained easterly across the Sanzi parcel in a wetland swale. It appears this resource area has been culverted since the 2005 septic plan submittal for the property. It now appears to flow into an 8" pipe shown on the plan.

Response:

The north side of the channel was delineated by wetland flags AA14 though AA19.

- d. The outlet from Pond 3P previously discharged in an area west of the new drive. It now will discharge farther to the east. It appears this change may send flow into a different watershed.

Response:

The outlet will discharge to the same watershed as the original stormwater design (DEP File #: 33-1379). The discharge pipe was only extended not re-directed.

- e. A portion of the access road will run through Pond 1P. It appears some minor grading changes result. The project engineer should confirm that this change will not impact overall attenuation in the pond. Should this section of the road be a more hardened surface, such as stone, to provide stability during wet conditions?

Response:

The maximum computed flood elevation in the pond 223.11 the emergency overflow is 223.5. The minimum road elevation is 223.75 therefore the road will not flood.

- f. The 224-contour on the westerly and southerly berm of Pond 1P appears to have been removed with the removal of the original access.

Response:

This edit was made on the plans with the revision date of November 3, 2016.

- g. A section of array appears to cross the access road near Pond 1P.

Response:

This edit was made on the plans with the revision date of November 3, 2016.

- h. Is the 3-pipe system necessary to carry flow into Pond 1P or is a lower, maintenance option available? Can this section be graded and armored similar to an emergency spillway?

Response:

The culverts are proposed in order to allow the water to flow under the road and not over it where it would enter the infiltration trench and likely fill it up.

- i. The replication area location is suitable in that it is previous altered and the abutting wetland is frequently "wet". However, it is also a young, wooded area. The Commission should weigh-in on possible replication area locations. The NDZ, NBZ, 100' Buffer Zone should all be measured outward from the outer limit of the final replication area.

Response:

The Commission provided feedback at the October 27, 2016 public hearing that the proposed mitigation location is fine. The NDZ, NBZ and 100 foot Buffer Zone lines were shifted to extend from the edge of the proposed mitigation area on the plans with a revision date of November 3, 2013.

- j. A detailed replication plan must be provided in accordance with the Mass DEP guidance document.

Response:

Sheet M-1, Wetland Mitigation Plan (11/3/16) is provided with the Supplemental Submittal.